

**Notice of Allowability****Application No.**

09/915,455

**Examiner**

Alicia M. Harrington

**Applicant(s)**

YAMAZAKI, SHOICHI

**Art Unit**

2873

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 2/8/06.
2. ☒ The allowed claim(s) is/are 7-23 and 26-28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of the:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)  
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_  
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material  
5. ☐ Notice of Informal Patent Application (PTO-152)  
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_  
7. ☐ Examiner's Amendment/Comment  
8. ☒ Examiner's Statement of Reasons for Allowance  
9. ☐ Other \_\_\_\_\_

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 7-23,26-28 are allowed.
2. The following is an examiner's statement of reasons for allowance: Regarding claim 7, prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the dependent claims, in such manner that a rejection under 35 U.S.C 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed limitations which include an image display apparatus comprising a reflective display, illumination means, first and second optical members wherein an optical surface A having two functions of transmission and reflection, shared between an illumination optical system and a display optical system, has a curvature on a local meridional section, where  $local-f_y$  represents a focal length in the local meridional section of the display optical system and  $local-f_{yA}$  a focal length in the local meridional section of only the optical surface A in the following condition as claimed.  
Regarding claim 13, prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the dependent claims, in such manner that a rejection under 35 U.S.C 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed limitations which include an image display apparatus comprising a reflective display, illumination means, first and second optical members wherein when a reference ray is defined as a ray which is illumination light from said illumination means that is reflected at the center of said display means and emerges therefrom and is incident on the center of a pupil, and a plane that includes

incident light and exit light of the reference ray in each surface is defined as a local meridional section in each surface, the following condition is satisfied as claimed.

Regarding claim 21, prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the dependent claims, in such manner that a rejection under 35 U.S.C 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed limitations which include an image display apparatus comprising a reflective display, illumination means, first and second optical members wherein an exit light of the reference ray in each surface is defined as a local meridional section in each surface, in the local meridional section of a display means surface, the optical path length of a ray, in said first optical member, that passes a most peripheral image on said display means at a far side from the observation position and a center of the pupil is longer than the optical path length of a ray, in said first optical member, that passes a most peripheral image on said display means at a near side from the observation position and the center of the pupil, and, wherein said display optical system includes a plurality of reflecting surfaces in said second optical member as claimed.

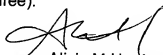
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Harrington whose telephone number is 571 272 2330. The examiner can normally be reached on Monday - Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571 272 2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alicia M Harrington  
Primary Examiner  
Art Unit 2873

AMH